

REMARKS

Claims 1, 6, 10, 17, and 22 have been amended for informal reasons. Although implied already, the claims (e.g., claim 1, 10, 17, and 22) have been amended to expressly clarify that the phrase “the received memory request” in the second claim element receives its antecedent basis from the first claim element. No new subject matter has been added by way of these amendments. Claim 29 has been cancelled without prejudice. Claims 1-3 and 5-28 are pending in the application.

In the present Final Office Action, the Examiner objects to claims 1-3 and 5-29, alleging that these claims include limitations not described in the specification. The Applicant respectfully disagrees. Claims 1-3 and 5-28 are discussed first, and claim 29 is addressed next. In claims 1-3 and 5-28, the Examiner specifically objects to the claimed feature of determining desired burst length/latency information based on the nature of the received memory request. Contrary to the Examiner’s assertion, the specification describes that the memory controller 160 is adapted to access the memory array module 150 at the desired burst length, the read (CAS) latency level, and/or write latency level based on the nature of the memory request received. *See, e.g.,* Patent Application, p. 9, line 18 – p. 10, line 5; *see also* p. 21, lines 9-15. For example, depending on the amount of data requested by the access device 120, the memory controller 160 selects the burst length and/or latency accordingly to accessing the desired data from the memory array module 150. In particular, if large amounts of data are desired by, for example, the main client 135 of the access device 120, the memory controller 160 may increase the burst length (and/or decrease the CAS latency level) associated with that memory access. Similarly, the burst length may be reduced (or the CAS latency level may be increased) for smaller data transfers,

such as those requested by the peripheral client 140 of the access device 120. Thus, in this example, the nature of the memory request is the amount of data being requested. The Specification also provides other examples where the determination of the burst length/latency information is based on the nature of the memory request. For example, the Specification describes that the burst length/latency information may be based on the source that is providing the memory request. *See, e.g., Id.* at p. 13, lines 15-25. In view of these non-limiting examples, the Applicant respectfully submits that the specification fully supports the claimed feature.

With respect to claim 29, the Applicant contends this claim is fully supported by the specification. However, in view of the cancellation of this claim, the Applicant does not address this issue at this time as the cancellation of claim 29 renders Examiner's objection and rejection under 102(a) moot.

The Examiner rejected claims 1-2 and 5-28 under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,675,270 (*Arimilli*). The Applicant respectfully traverses the rejection. Claim 10 is discussed first. Claim 10 calls for a controller that is adapted to provide a command to access a memory array in response to a memory request received from a source. Thus, this element calls for the controller to (1) receive a memory request from a source and, in response, (2) provide a command to the access the memory array. Claim 10 further specifies for the controller to determine at least one of burst length information and latency information based on the nature of the memory request received from the source.

Arimilli fails to teach on or more of the claimed features. To illustrate the deficiency in the Examiner's rejection, it is helpful to understand how the Examiner applies *Arimilli* to the claims. The Examiner asserts that "source" of claim 10 corresponds to the "processor 110" in *Arimilli*. Office Action, p. 5, ¶5. Further, the Examiner asserts that the "controller" of claim 10 corresponds to the "controller 235" in *Arimilli*. *Id.* The Examiner's rejection, however, is deficient because the controller 235 in *Arimilli* does not determine burst length information based on the nature of the memory request received from the source, as is called for by claim 10. Rather, in *Arimilli*, the processor determines the burst length. *See Arimilli*, 4:30-34 (describing that the "processor" generates a read command that includes the burst length).

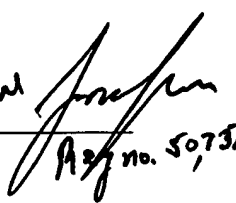
The other pending claims are similarly allowable for the reasons presented above.

The Office Action suffers from other deficiencies as well. Consider claim 5, for example, which calls for determining the burst length information based on an amount of data to be retrieved from the memory. *Arimilli* does not teach this feature. Although the Examiner cites to col. 2, lines 58-60, this cited text simply describes that read bursts may be longer than write bursts because, in the write bursts, only the modified data is written back. There is no teaching in *Arimilli* that read requests can retrieve different amounts of data depending on the amount of data to be retrieved. To the contrary, Figure 5 of *Arimilli* illustrates the read requests are of the same number of beats. In contrast, claim 1 calls for determining the burst length information based on the amount of data to be retrieved from a memory.

Claim 6 illustrates another deficiency in the Office Action. Claim 6 calls for determining the burst length information based on the source that provides the memory request. *Arimilli* does not teach that the burst length information may vary based on the source of the memory request. To the contrary, Figure 5 of *Arimilli* indicates that the burst length remains the same, regardless of the source.

Arguments with respect to other dependent claims have been noted. However, in view of the aforementioned arguments, these arguments are moot and therefore not specifically addressed. To the extent that characterizations of the prior art references or Applicant's claimed subject matter are not specifically addressed, it is to be understood that Applicant does not acquiesce to such characterization.

The Examiner is invited to contact the undersigned attorney at (713) 934-4064 with any questions, comments or suggestions relating to the referenced patent application.

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